

New Bell Forwarders designed to go the distance

As a South African manufacturer, Bell Equipment prides itself on understanding the needs of the country's forestry industry and being able to provide specific mechanisation solutions designed and engineered locally for local requirements.

The Bell T302D Long Range Forwarder is a prime example and the company's most recent forest product offering. According to Bell Equipment's Product Marketing Manager: Sugar and Forestry Products, Tim Beningfield, the T302D is a combination of a truck and a forwarder. "The aim is to improve the efficiency of operations by offering the marketplace a truck that can load and haul timber from infield and transport it distances of up to 10km. The T302D effectively eliminates the need to transfer at roadside, thereby limiting the handling of timber while reducing operating costs and equipment requirements."

Adapted from the proven Bell Articulated Dump Truck (ADT), the T302D has a rugged, purpose-built timber haulage chassis and is fitted with a Waratah crane that has up to 380 degrees operating capability and an 8,5m reach. However, key to the T302D concept is its purpose-built dual facing cab with crane controls, which enables the operator to swivel to a rear-facing direction and have excellent visibility while loading timber with the onboard crane.

Under the bonnet is the latest Mercedes Benz low emission diesel engine technology. The 6-cylinder turbocharged, intercooled engine has the option of 170kW or 205kW gross power output. The Bell T302 is available with either a 4x4 or a 6x6 drivetrain configuration with a load capacity of 22 tonnes or 30 cubic metres.

Comments Beningfield: "A great deal of thought has gone into the T302D to ensure that it delivers the goods. An example is the automatic oscillation lock, which locks the front and rear chassis together for stability during loading. The drivetrain is protected by comprehensive guarding with deck and belly plating on the rear chassis and belly plating on the front chassis to shield the drop box and transmission while the heavy duty propshafts have been raised for maximum ground clearance."

In addition the 4x4 truck has a lower centre of gravity to provide extra stability when travelling laden over rough terrain. It also shares the same robust drivetrain and axles of the Bell's 30 tonne ADT to give it a wider track and greater load carrying capacity.

The T302D is fitted with a full set of xenon operating lights, two forward facing, four in the rear and two mounted on the crane. Lighting is recessed for protection in the harsh forest application while the operator's cab is

a ROPS/FOPS structure and provides superior operator comfort. "A sky roof optimises visibility when the crane is in operation while Lexan windows provide added safety. Likewise the cab guarding is ray orientated to limit dead zones and improve visibility," said Beningfield.

However, the beauty of the T302 is the flexibility it affords a harvesting operation. With a top speed of over 50km/h the long range forwarder will load tree lengths or cut-to-length logs infield and haul them to a central depot up to 10km away, delivering quick cycle times and fuel efficiency.

The effectiveness of the long range forwarder concept has been demonstrated in SQF's Dukuduku plantation in Zululand, where a T302D is working for Siyawisa Hlati contractors. Owner of Siyawisa Hlati, Joseph Zulu said he has been impressed with the T302D's fuel efficiency and high level of operator comfort.

The timber is felled with chainsaws and then debranched and debarked by two excavators fitted with Waratah HTD316C heads. The timber, which has a diameter of about 120mm at breast height, is cross-cut into 5,5m lengths. During an average day of two 12-hour shifts about 300 tonnes are hauled by the T302D to the depot just under a kilometre away.

The T302D Long Range Forwarder is just one of six haulage/forwarding solutions offered by Bell Equipment.

Apart from the T302D 4x4 and 6x6 Long Range Forwarder configurations, there is also the larger T403D, a 6x6 Long Range Forwarder with a 40 cubic metre capacity. The two T302Ds and T403D are also available as dedicated haulers without a dual facing cab and crane.

Complementing the range is Bell's Series III Haulage Tractors, also known as Africa Tractors. The six models in the range are also tough, purpose-built haulers ideally suited to timber haulage over shorter distances. Beningfield said: "These machines together with our extensive range of John Deere forestry products and Waratah debarking and processing heads enables us to offer a full range of forestry solutions to the local industry."

Adds Francois van Tonder, Bell Equipment's General Manager of the Coastal Region: "Critical to the success of forestry mechanisation is training, rapid response technical backup and spares availability. Importantly we are able to backup our complete range of forestry products with dedicated technical support, which includes trained technical staff at factory level as well as at our various workshops located in the major forestry areas."

